LEARNMORE
STUDENT ACTIVITY

SMART SAVING

Kylie is in eighth grade and will be in college in five years. She babysits for her cousin one day a week and earns $30 per day.

1. **How much will Kylie earn in one year?**_____
2. **In five years?** _____
3. **If she saves 20 percent of her money for college, how much will she have for college in five years?**_____
4. **What if she saves 30 percent?** _____
5. **Or 50 percent?** _____

Compounded Interest

Kylie doesn't want to leave her college savings in the piggy bank since she can earn interest by depositing her money in a savings plan. Suppose her grandparents decide to pay her all the money upfront. How much can she earn with interest if interest is compounded each year for five years? See the box on the right side of the page if you don't remember how to compound interest.

6. **If she saves 20 percent of all the money (answer in problem 3) and earns two percent interest?**_____
7. **If she saves 30 percent (problem 4) and earns two percent interest?**_____
8. **If she saves 50 percent (problem 5) and earns two percent interest?** _____

Your Turn

What can you do to save money for college? Think about all the ways you earn money whether chores, babysitting or gifts.

_____

_____

_____

What's your saving goal? What percentage of your money will you save for college? _____

Compounded Interest

When Kylie puts the money in the bank the first year, she'll earn two percent of it back. But the next year, she'll earn two percent of the original amount plus two percent on the interest she earned the previous year.

Here's how it works, if she deposits $100 for two years:
Year One: Beginning amount = $100
Interest = 0.02 x $100 = $2
Total = $100 + $2 = $102

Year Two: Beginning amount = $102
Interest = 0.02 x $102 = $2.04
Total = $102 + $2.04 = $104.04

You can also use this formula:
Total = beginning amount $(1 +$ interest rate$)^{\text{number of years}}$

Total = $\$100(1 + .02)^2 =$
$\$100(1.0404) = \$104.04$